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Lactarius Notebook 42

L. R. Hesler

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LACTARIUS VELLEREUS (Fr.) Fr.

~~LACTARIUS VELLEREUS (Fr.) Fr.~~

Leg. Burlingham No. 7, from Pink Beds, N.C., 1907
(labelled L. subvellerus Pk., and reported as
this species in Memoirs Torrey Club 14:23. 1908).

Illus:
Smith, Mushrooms in Nat. Hist., Reel 10, No. 65.

Pileus 3-4.5 cm broad, depressed, azonate,
white, becoming near "tawny olive" when dried, velvety,
margin remaining incurved. Context medium thin. Latex
white, drying cream-colored on the gills, acrid.

Lamellae adnate or subdecurrent, white then pale cream-
colored, staining brownish, narrow, close at first, becoming
nearly subdistant at maturity.

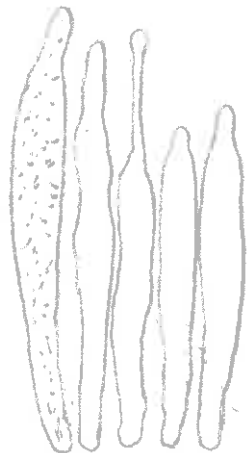
Stipe 2-3 cm long, 10-14 mm thick, concolorous,
velvety, hollow.

Spores 7-9.5 (10) x 5.5-7 μ , ellipsoid in face
view, often inequilateral in profile, warts very short,
with some fine, connecting lines. Basidia 48-56 x 6-8 μ ,
4-spored. Pleurocystidia 42-58 x 4-7 μ , ventricose to
subclavate, often constricted, granular, abundant near
the edges, rare and inconspicuous elsewhere;
cheilocystidia 37-48 x 5-8 μ , similar, or rarely
spathulate, granular. Gill trama vesiculose. Pileus
trama vesiculose. Pileus cuticle bearing a turf of
colorless, slender (2-4 μ diam.), long (80-175 μ)
hyphae. Stipe cuticle with a turf similar to that of
the pileus, but also with scattered caulocystidia, 34-53
x 4-5 μ , clavate-cylindric, granular. Clamp connections
none.

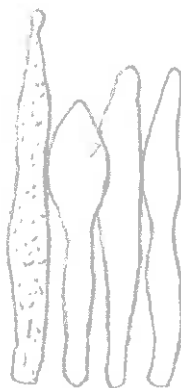
(Revise, and includes notes on Tenn-3740, 3742, 9168.)

Factarium vellerens (Fr.) Fr.
~~*subvellerens* Fr.~~ senon Burl.

leg. Burl. Pink Beds, N.C., No. 7, 1907.



Pl - x 1000
 [granular]



Ch - x 1000
 [granular]

[~~*Aspergillus*~~ *Aspergillus*,
~~*repens*~~ *repens* in type
 of ~~*subvellerens*~~]

^{Epnes}
 [as in *Randell-Naunfeldt*,
 No. 2334]



Caulo - x 1000
 (scattered in hyphal turf)

L. vellereus

K. & R. give spores 9-12.2 x 7.5-10 μ .

Their Key, as follows:

B) Latex very acrid, as also the flesh. Lamellae
often forked, or anastomose lacunate: Spores
9-12.2 x 7.5-10 μ L. vellereus

B) Latex mild or nearly so. Lamellae more crowded.
Spores smaller (similar to piperatus), 7.5-9 x
7.2-8 μ var. velutinus Bertill.
(=var. bertillonii Neuhoff nom. nov.)

Moser, p. 261, gives same in his Key!

Ricken, p. 29, gives spores for vellereus 9-10 x 8-9 μ .

Lactarius vellereus (Fr.) Fr. var. vellereus

Epicr. Myc., p. 340. 1838

Agaricus vellereus Fr., Syst. Myc. 1:76. 1821.

Lactarius velutinus Bertillon, Dict. Encycl. Dechambre (1865)

Lactarius vellereus var. bertillonii Neuhoff nom. nov.

Die Milchlinge, p. 93. 1956

Lactarius vellereus var. velutinus Bertilloni (---?)

Latex milder than in var. vellereus; and with anastomosing
lamellae.

Lactarius vellereus var. hometi Gill.

(try: Champ. Fr., Hymenomycetes)

Latex (white) becomes violet on exposure to air; stipe sub-
lateral (see Maire: Ann. Myc. 11:343. 1913); lamellae
anastomosing.

Lactarius vellereus var. trifurcatus Roman Schulz

Michael-Schultz I, No. 62. 1924.

With 3-fold (3-times) forking of lamellae.

Lactarius vellereus var. exsuccus Roman Schultz

Entirely without latex, with mild pileus-flesh and with
acid stipe-flesh. (cf. Coker's L. subvellereus
Form A, p. 10)

Maire, Rene. 1913. Etudes mycologiques. Annales Mycologici
11:331-358 (Lactarius vellereus Fr., pp. 342-343).

7. LACTARIUS VELLEREUS Fr.

Recently the French authors have divided this Fresian species into three: L. vellereus Fr. (sensu stricto), L. velutinus Bertill. in Dict. Encycl. Dechambre, L. hometi Gill. These three species are described separately in the Flore des Champignons Superieurs de France by Bigeard and Guillaumin.

Lactarius vellereus Fr. (sensu stricto) is characterized, by these authors, chiefly on its acrid latex, its acrid flesh, slightly yellowing on exposure to air. In addition, Boudier emphasizes in word and correspondence that there is anastomosing of lamellae at their bases.

Lactarius hometi Gill. t 532; Boudier Icon. Myc. I. 49, is an eccentric-stiped variety of the preceding, the acrid latex becoming violaceous on exposure to the air. According to Boudier, it has the basal transverse anastomosing of the type.

Lactarius velutinus Bertill., with mild latex and acrid flesh, becoming more or less ochraceous on exposure to the air, no anastomosing at the lamellae bases. This is the type most frequently found in France.

The form of L. vellereus Fr. which we have seen in Sweden in the vicinity of Stockholm which corresponds perfectly to Fries' descriptions, and his plate in Museum de

Stockholm, with its acrid latex, but its lamellae ordinarily do not show basal transverse anastomosing, but anastomose occasionally obliquely at diverse levels (depths?).

On the other hand, we have met in the Vosges Mountains, near Badonviller, a form which presents the mild latex of L. velutinus, now and then with basal transverse anastomosing of the lamellae. The latex and the wounds of lamellae of this form become violaceous as in L. hometi; but the stipe is central.

In these Lactarias the microscopic characters are the same; the spores in particular are identical. But it appears that since we have seen intermediate forms among L. vellereus, velutinus, and hometi, that the last two should have been at first given the rank of mere varieties.

Bas (unnumbered) LACTARIUS VELLEREUS (Fr.) Fr.

Under oak, roadside, The Netherlands, Butsterswaag, September 14, 1954

Notes by Bas (Transl. by Donk)

Cap 95 mm, convex, with a wide shallow umbilicus, dirty white, yellowish brown spotted, finely woolly-hirsute, especially on margin where the hairs form more or less ribs and gives reticulate structure. KOH straw-yellow then orange brown. Flesh yellowish white. Milk white, unchanging, acrid, FeSO_4 gives salmon-orange.

Gills very narrow (3 mm), rather spaced, often forked, pale straw with brownish spots.

Stalk 55 x 23-30 mm, wider above, stuffed, pale ocher yellow, base darker than top, finely and densely pubescent.

Notes by Hesler

Pileocystidia turf 180-500 μ high. Otherwise as in Bas-2838. Spores rather sparse.

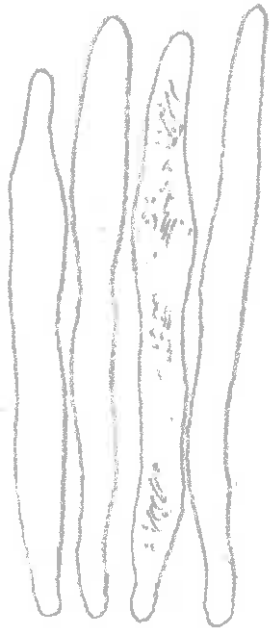
LACTARIUS VELLEREUS

Fungi Exsicc. Suecici, Lundell-Nannfeldt. No. 2334,
September 17, 1939.

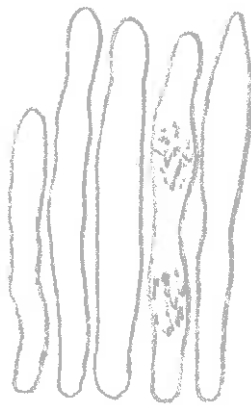
Spores 7-9 x 7-8.5 μ , ellipsoid to broadly ellipsoid or subglobose, warts less than 0.1 μ high scattered, with fine lines, broadened at intervals, connecting the warts and forming more or less a reticulum. Basidia 48-63 x 9-12 μ , 4-spored. Pleurocystidia abundant, 72-80 x 6-7 μ , cylindric filamentous, sometimes slightly constricted, granular. Cheilocystidia abundant, 37-50 x 4-6 μ , cylindric-filamentous to slightly constricted, granular. Gill trama cellular. Pileus trama vesiculose. Cuticle of the pileus of repent hyphae, bearing more or less erect, dense, colorless hyphae, 3-6 μ broad, forming a turf, 100-300 μ high (the tomentum). In tangential sections, the surface zone appears cellular, but in radial sections it is clearly of repent, interwoven or subparallel hyphae.

Factarium vellerens

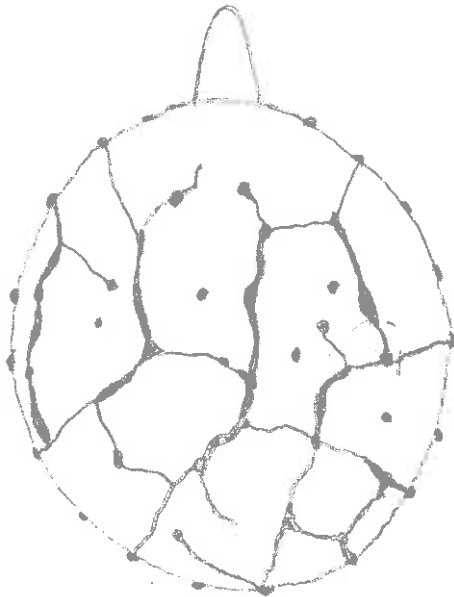
Fundell-Kauffelt - 2334, Fungi Sencisi, Sept 17, 1939



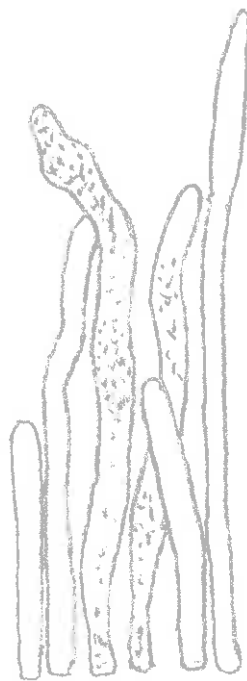
Pl - x 1000



Ch - x 1000



Spore - x 8000



Fichodermium on
stipe as Paulo - x 1000

LACTARIUS VELLEREUS

The identifications of specimens
under this binomial in the following notes are
at best only tentative.

-LRH

Shaffer - 2491

LACTARIUS VELLEREUS

In aspen/red maple woods, Rose City, Michigan, July 28, 1960.

Spores indicate vellereus.

Bas-2838

LACTARIUS VELLEREUS (Fr.) Fr.

In mixed deciduous woods, predominately Fagus, July 10, 1962, St.
Ochlienberg, Linburg, Netherlands

(No notes by Bas)

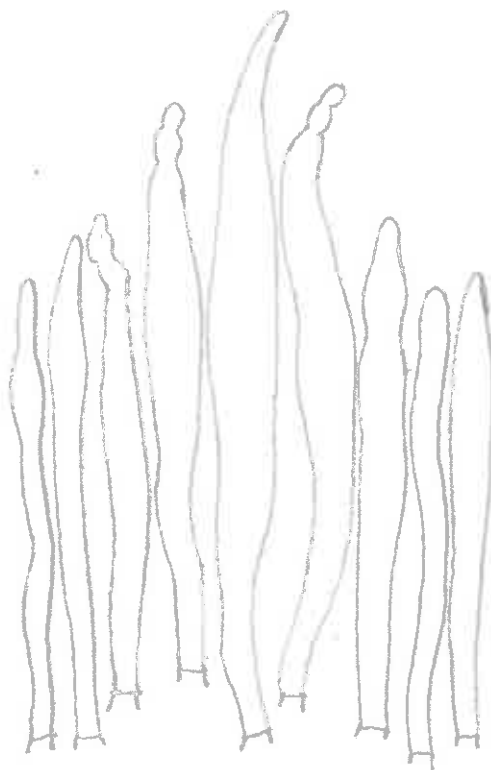
Notes by Hesler

Pileus 8.5 cm, velvety. Stipe hollow, velvety.

Spores 7-9.5 x 7-8 μ , broadly ellipsoid to subglobose, rarely globose, warts very short, few isolated, bands and lines forming a partial reticulum (as in Lundell-Narmfeldt 2334). Basidia 54-67 x 8-11 μ , 4-spored. Pleurocystidia 63-96 x 5-9 μ , subventricose, more or less acuminate, apices often nodulose; cheilocystidia 38-45 x 4-7 μ , subventricose to subcylindric, apices tapering slightly or none. Pileus trama with rosettes in upper third (unusual! usually in lower third). Pileus cuticle of repent hyphae bearing a turf of colorless, rather thick-walled hyphae, 100-325 x 3-5 μ , septations rare. Stipe cuticle as in cap; rosettes present.

Factarium vellerens (Fr.) Fr.

Bas-2838



Pl - x1000



Ch - x1000

[Spores as in Fendell-Kauffeldt-2334]

Shaffer - 3786

LACTARIUS VELLEREUS

In hemlock-hardwood forest, Porcupine Mts., Ontonagon Co., Michigan,

August 24, 1962

Spores okay for vellereus.

Thiers - 3832

LACTARIUS VELLEREUS

In open hardwoods, Burt Lake, Michigan, August 7, 1956.

Micro characters usual.

Maas G. - 9014

puberellus
LACTARIUS VELLEREUS Fr.

On humus with sandy soil, under oak, Leuvenum, Holland, September 10,

1952

Notes by Maas G. (Transl. by Donk)

Cap (about 11 cm), white, ocher-yellow spotted, greenish on margin, pubescent-velutinous, strongly inrolled margin. Milk white, unchanging, exuding slowly, ocher-yellow in KOH, taste acrid.

Gills very pale sulphur-yellow, spotted yellow-brownish, with a bluish-green sheen, rather ~~crowded~~ ^{close}, usually forked, lamellulae numerous.

Stalk short, thick (45 x 32(20) mm, flattened), compact, white with ocher-yellow spots, finely pubescent, Fe and dingy pink.

Notes by Hesler

Spores 7-9 x 6.5-8 μ , orn. as in Bas-2838. Other micro characters as in Bas-2838, except that the turf on the pileus is shorter.

Note that the gills are "rather crowded" (I suggest "close," not distant).

Maas G. - 12411 LACTARIUS VELLEREUS (Fr.) Fr.

In grass, Hierden, Hulshorst, Holland, October 20, 1956~~7~~ (No notes by
Maas G.)

Notes by Hesler

Spores 7.5-9(10) x 7-8~~10~~ μ . Other micro characters as in
Bas-2838.

Maas G - 13881 LACTARIUS VELLEREUS (Fr.) Fr.

In mixed Quercus-Fagus forest, Speulde, The Netherlands, October 21, 1962

Notes by Maas G. (Transl. by Donk)

Cap up to 17 cm, felted, margin more floccose, later the hairs adhere together and give a reticulate appearance, at first white, later cream or faintly flesh-colour, toward the center faintly flesh color, brownish. Milk white, not acrid.

Gills crowded, often forked near stalk, up to 6 mm wide, pale straw-yellow to lemon-yellow.

Stipe 3-4 cm x (up to) 4 cm, finely velutinous-hairy, white with rusty yellow spots.

Notes by Hesler

Micro characters as in Bas-2838.

24049

LACTARIUS VELLEREUS

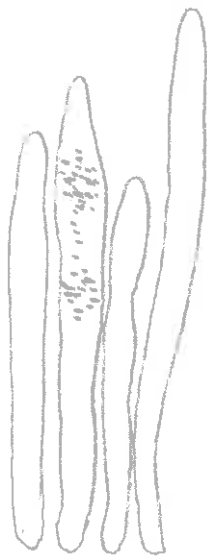
In ash-oak woods, England, Dennis, October 15, 1960

Pileus and stipe near "chamois" and velvety-tomentose.
Gills nearly subdistant.

Spores 7.5-9.5 x 6-8 μ , subglobose to short-ellipsoid, warts very short, fine lines forming more or less a reticulum. Pleurocystidia 50-72 x 4-6 μ , cylindric, granular; cheilocystidia 45-50 x 5-7 μ , cylindric-clavate, often constricted, granular. Gill trama of interwoven hyphae and small cells. Pileus trama vesiculose. Cuticle of pileus bearing a turf 200-300 μ high, some hyphae 500 μ long and thick-walled, resting on a brownish hypodermium. Cuticle of stipe-apex bearing a turf of slender hyphae, no caulocystidia.

Factarius vellerens

Tenn-24049 (from Kew)



Gl - x 1000



Ch - x 1000

25480

LACTARIUS VELLEREUS

Netherlands, Geesteranus, Oct. 21, 1962, in oak-beech woods.

Pileus and stipe near "cream buff" (dried), velvety-tomentose, at times the fibrils form a reticulum on the surface. Mass Geesteranus says that the latex was white, and mild when collected. (Neuhoff, p. 94, states that Maire reports a collection in which the latex is milder than in L. vellereus.) Lamellae nearly close to subdistant.

Spores ^{7.5-9.5 x 6.5-7.5 μ} ~~7.5-9.5 x 6.5-7.5 μ~~, subglobose to short-ellipsoid, warts short, with more or less a reticulum of both fine and coarse lines. Basidia 46-65 x 8-10 μ, 4-spored. Pleurocystidia 62-72 x 4-6 μ, cylindric, apices usually rounded or conic, scattered, often buried and inconspicuous, granular; cheilocystidia 46-63 x 4-6 μ, similar. Cuticle of pileus a trichodermium of more or less erect, long (200-600 μ), slender, thick-walled hyphae (tomentum). Cuticle of stipe-apex with a turf of: (1) slender, long hyphae; (2) irregular, constricted pileocystidia; (3) long, cylindric, granular pileocystidia.

This is probably L. vellereus var. bertillonii Neuhoff.

30377

LACTARIUS VELLEREUS (Fr.) Fr.

In forest of Quercus mongolica, Kyoto-pref., Japan, September 28, 1963.
(ex-herb. Hongo).

Spores 7.5-9.5 x 7-8.5 μ , ellipsoid, usually broadly so, warts very short, with lines (broadened at intervals) forming more or less a reticulum. Other characters as in Lundell-Nannfeldt - 2334.

35724

LACTARIUS VELLEREUS

Among grass, Storveta, Sweden, leg.-det. Lundquist, October 1, 1970

Notes by Petersen-4995

Pileus white, tawny where not protected, resembling L. allardii.
Latex off-white, promptly very acrid, unchanging.

Notes by Hesler

Pileus more or less 9 cm, dried: greyish-white, velvety. Gills subdistant or nearly distant, rather narrow.

Spores white in deposit, 7.5-9 x 5.5-7 μ , ellipsoid to slightly ovoid, warts short, few lines connecting. Pileus cuticle a surface zone of brownish, repent hyphae bearing a turf of dense, long (125-250 μ) erect hyphae, 3-4 μ broad. Otherwise as usual.

35735

LACTARIUS VELLEREUS

Under pine and spruce, Fyby Forest, near Uppsala, Sweden, leg.

Petersen-5070, det. Lennart Holm, September 5, 1970

Notes by Hesler

Spores 7.5-9 x 5.5-7 μ , rather variable, warts very low, a few fine lines. Otherwise usual.

Sm-75630

~~Sm-75630~~

LACTARIUS VELLEREUS

UMBS Michigan, Cheboygan County, July 22, 1968.

Spores 7-9.5 x 5.5-7.5 μ , ellipsoid. Pleurocystidia 52-78 x 4-7 μ ; cheilocystidia 37-52 x 3-6 μ . Pileus cuticle a dense turf of long (60-500 x 3-5 μ) erect hyphae, at times septate. Stipe cuticle similar, turf elements 35-250 x 2-5 μ ; ~~tp~~ rosettes present.

Sm-77611

LACTARIUS VELLEREUS

N.W. corner, Montmorency County, Michigan, July 27, 1969

(No Notes by Smith)

Dried, it resembles L. vellereus.

Spores 7-9 x 5.5-7 μ (very few found). Pleurocystidia and cheilocystidia abundant! Pileus cuticle a dry trichodermium.

Sm-75952

LACTARIUS VELLEREUS

Michigan Biol. Station, August 10, 1968.

Notes by Smith

Latex cream-yellow; spores white.

Notes by Hesler

Spores $6.5-8.5 \times 5.5-6.5 \mu$. Otherwise usual, with subdistant gills.

cf. L. vellereus var. bertillonii n. nom. (see Neuhauff p 93),
which has spores $7.5-8.5 \times 6.5-7 \mu$, but mild taste.

retius (Fr.) Fr.
LACTARIUS ~~VARIUS~~ PK.

In moist places, thin woods, Karner, N.Y., September

Type (of G. varius PK.)

Spores 7-9 x 6-7.5 μ , ellipsoid, warts 0.2-0.5 μ high, with bands and branches, forming a partial reticulum. Basidia 34-38 x 6-7 μ , 4-spored. Pleurocystidia 40-62 x 3-7 μ , fusoid-ventricose, apices tapering, granular-spangled, rare and inconspicuous; cheilocystidia 30-42 x 3-5 μ , ventricose, apices tapering, granular-spangled. Gill trama of interwoven hyphae. Pileus trama vesiculose. Pileus cuticle a very thin gelatinous to subgelatinous zone of repent hyphae. Stipe cuticle thinly gelatinous, hyphae repent; rosettes present. Caulocystidia and clamp connections none.

A spore-print, accompanying the Type, is a heavy deposit of spores which are ellipsoid, smooth, brownish in Melzer's reagent. Evidently this spore-deposit belongs in a collection of some other agaric, possibly a Collybia.

The pileus- and stipe-cuticles are very thin ixocutis--so thin, in fact, that it was at first overlooked (especially the stipe).

Pleurocystidia and cheilocystidia inconsequential!

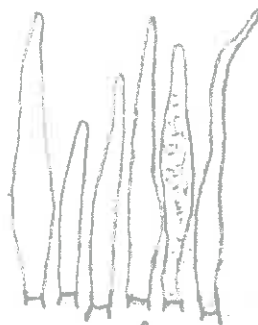
The dried cap is near tawny to cinnamon buff!

Pastorius ~~varius~~ PK. victus

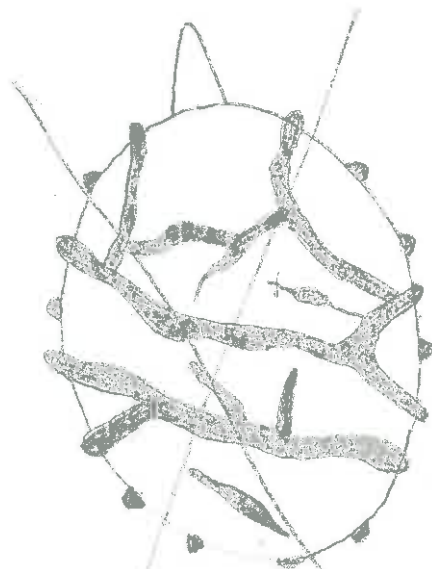
Type (of varius PK)



Pl. $\times 1000$

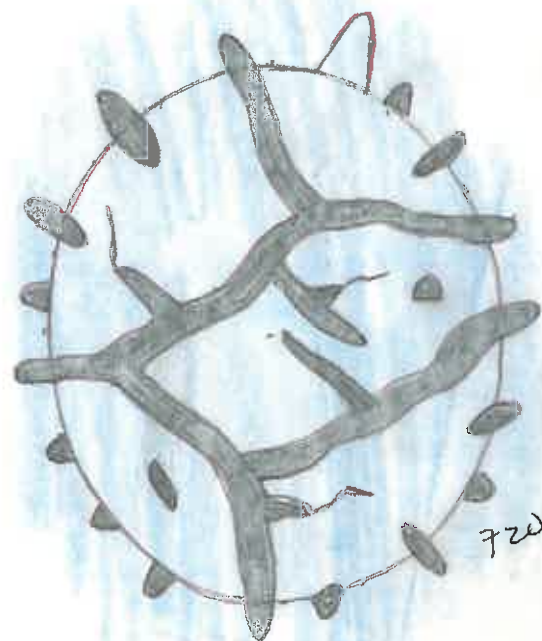


Ch. $\times 1000$



Spae $\times 8000$

Diane:
This one \rightarrow



Spae $\times 8000$

~~LACTARIUS PARVUS~~ ~~PK.~~
vieta (Fr.) Fr.
~~PK.~~

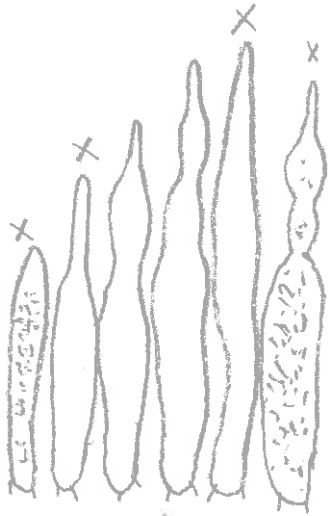
Sandlake and Grieg, August

Type (of *L. parvus* PK.)

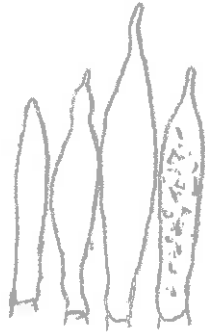
Spores 7-9.5 x 6-7.5 μ , ellipsoid, warts 0.3-0.5 μ high, with broad bands forming more or less a reticulum, with a few free ends, more rarely with a line or narrow band. Basidia 33-38 x 7-9 μ , 4-spored. Pleurocystidia 33-60 x 4-8 μ , subfusoid or subclavate, apices tapering, granular-spangled; pseudocystidia scattered, refractive filamentous; cheilocystidia 28-40(56) x 4-7 μ , similar to pleurocystidia. Gill trama of undulating, subparallel hyphae. Pileus trama vesiculose. Cuticle of pileus a gelatinous zone, 25-35 μ thick, resting on a brown hypodermium of thickness equal to cuticle. Stipe cuticle a narrow ixocutis; rosettes none. Caulocystidia, pileocystidia, and clamp connections none.

Sactarium ^{victus (Fr.) Fr.} ~~*parvus* (Fr.)~~

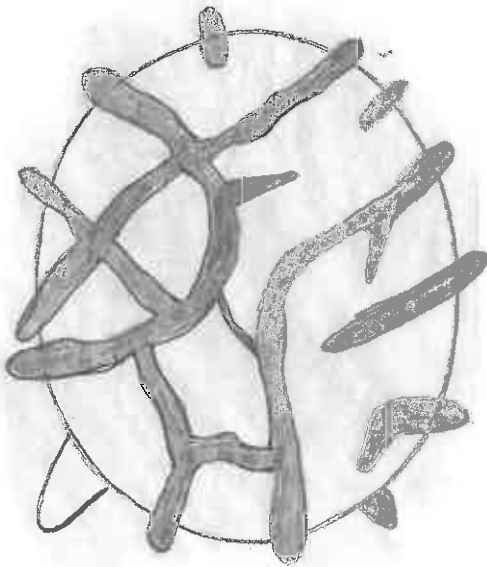
Type (of *parvus* (Fr.))



Sp - x 1000



Sp - x 1000



Spore - x 8000

730

Lactarius vretus (Fr.) Fr.

Lactarius parvus Fr.

~~LACTARIUS PARVUS Fr.~~

New York State Mus. Rept. 38:127. 1885

Pileus 1-2.5(4) cm broad, nearly plane or depressed, reddish-brown or lilac-brown, becoming paler in age, azonate, glabrous, viscid, margin even. Latex white, unchanging but staining the gills dingy-greenish or olivaceous where wounded; taste acrid.

Lamellae decurrent, white to yellowish, dingy-greenish where wounded, close, narrow.

Stipe 12-24 mm long, 2-4 mm thick, whitish, viscid, equal or slightly tapering upward, often curved, stuffed.

Spores "pale pinkish buff" in deposit, 7-9.5 x 6-7.5 μ , ellipsoid, warts 0.3-0.5 μ high, with broad bands forming more or less a reticulum, with a few free ends, more rarely with a line or narrow band. Basidia 33-38 x 7-9 μ , 4-spored. Pleurocystidia 33-60 x 4-8 μ , subfusoid or subclavate, apices tapering, granular-spangled; pseudocystidia scattered, refractive filamentous; cheilocystidia 28-40(56) x 4-7 μ , similar to pleurocystidia. Gill trama of undulating, subparallel hyphae. Pileus trama vesiculose. Cuticle of pileus an ixocutis, 25-35 μ thick, resting on a brown hypodermium of equal thickness. Stipe cuticle a narrow ixocutis; rosettes none. Caulocystidia, pileocystidia, and clamp connections none.

OBSERVATIONS - Peck found it only on wood. It is near varius which has a dry stipe; parvus lacks an umbo, and is paler with age. Peck suggests that it might be considered merely a variety of varius.

The description above is based on the Type.

vietus (Fr.) Fr.
~~*hypoxanthus* nom. nov.~~

LACTARIUS ~~TRIVIALIS~~ var. ~~GRACILIS~~ Pk.

In woods, Greig, N.Y.

Type (of *trivialis* var. *gracilis* Pk.)

Spores 7-8.5 x 5.5-7 μ , ellipsoid, warts 0.2-0.4 μ high, broad bands and an occasional narrow one forming ^{partial to nearly complete} a reticulum, with some free ends. Basidia 42-50 x 7-9 μ , ~~8-10 μ~~ , 4-spored. Pleurocystidia 42-66 x 5-11 μ , ventricose, apices tapering, granular-spangled; cheilocystidia 38-56 x ~~4-8 μ~~ ^{4-8 μ} , similar, or with the apices constricted to slightly moniliform, granular-spangled. Gill trama of undulating narrow hyphae; subhymenium of small cells. Pileus trama vesiculose. Cuticle of the pileus a gelatinous zone, ^{an ixocutis,} 25-50 μ thick, ^{or at times ~~less~~ thinner,} resting on a brownish hypodermium. Cuticle of the stipe of subgelatinous hyphae, bearing caulocystidia, 42-55 x 3-5 μ , filamentous, at times subcapitate, scattered or in small tufts. Clamp connections none.

Peck (Rept. 38: 121. 1885.) in describing it as a variety, states that it is small (pileus 2.5-5 cm.), stipe equal to or longer than the diameter of the pileus, often tapering downward. He further states that var. *gracilis* (and also var. *maculatus* Pk.) runs into var. *trivialis* so as to leave scarcely a doubt of their specific unity.

L. *trivialis* var. *gracilis* Pk. differs from var. *trivialis* in its smaller spores, slightly different

vietus (Fr.) Fr.
L. ~~trivialis~~ var. *gracilis* - 2
(TYPE)

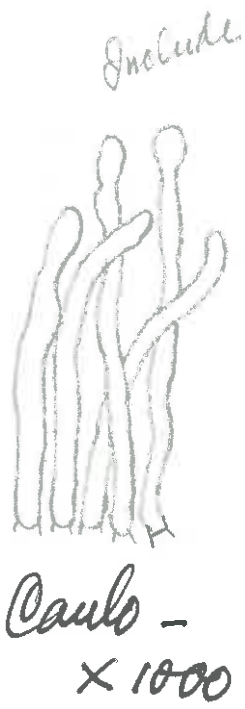
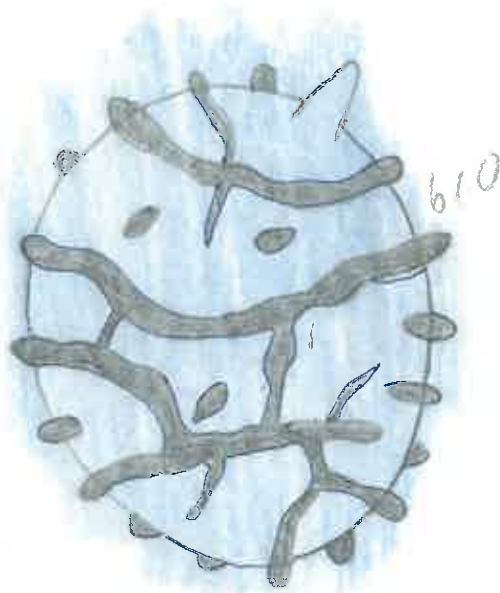
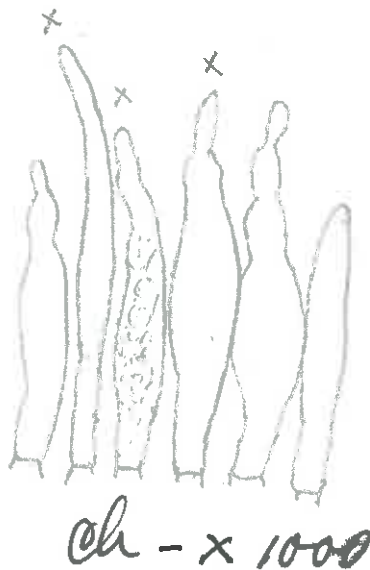
~~Lactarius Trivialis var. Gracilis Pk.~~

ornamentation (shorter warts and more distinct reticulum),
and its much smaller pileus. Perhaps it should be
L. *gracilis* (Pk.) ~~stat.~~ ^{stat.} nov. The dried pilei are a
dull brown (near "verona brown").

Factarins trivialis ^{victus (Fr.) Fr.} ~~var. gracilis Pk.~~

~~non - horticola non nov.~~

Type (Fr. *trivialis* var. *gracilis*)



Bas - 620

LACTARIUS VIETUS (Fr.) Fr.

Leg.-det. Bas, September 12, 1957, *The Netherlands*

Notes by Bas

Pileus 40-59 mm broad, convex with a central depression to irregularly funnel-shaped, pale brown-grey with pink or purple tinge, not or hardly zoned, smooth when dry, margin somewhat satiny. Context white then greyish, occasionally becoming violet-grey; odor not conspicuous. Latex copious, white at first, drying greenish-grey, acrid.

Lamellae short-decurrent, pale ochre-cream, occasionally salmon-cream, with dark spots, narrow, crowded.

Stipe 40-55 mm long, 7-12 mm thick, pale yellow ochre with salmon hue, then brown, apex pale and pubescent, base white-felted, cylindric, or thicker at base or toward apex, hollow.

Spores 7.3-8.7 x 5.6-6.7 μ . Cap pellicle with numerous dark-brown granules of pigment.

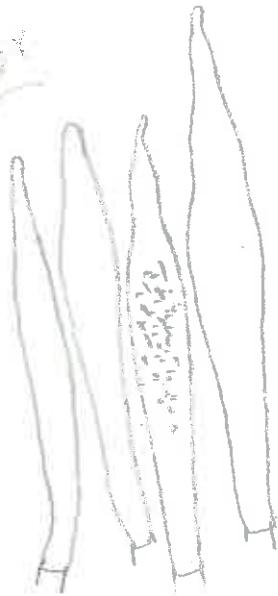
Notes by Hesler

Spores 7-9.5 x 6-8 μ , warts 0.3-0.8(1.0) μ high, bands with free-ending branches forming a partial reticulum. Basidia 40-48 x 8-9 μ , 4-spored. Pleurocystidia 55-70 x 6-8(10) μ , subventricose, apices tapering and at times subcapitate; pseudocystidia filamentous; cheilocystidia 38-53 x 4-7 μ , similar. Gill trama of undulating hyphae; subhymenium of small cells. Pileus trama vesiculose. Pileus cuticle an ixocutis; hypoderm brown. Stipe cuticle repent, dry; rosettes none. Clamps none.

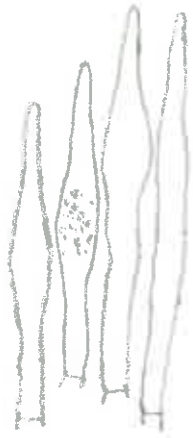
Lactarius vietus (Fr.) Fr.

Bas - 620

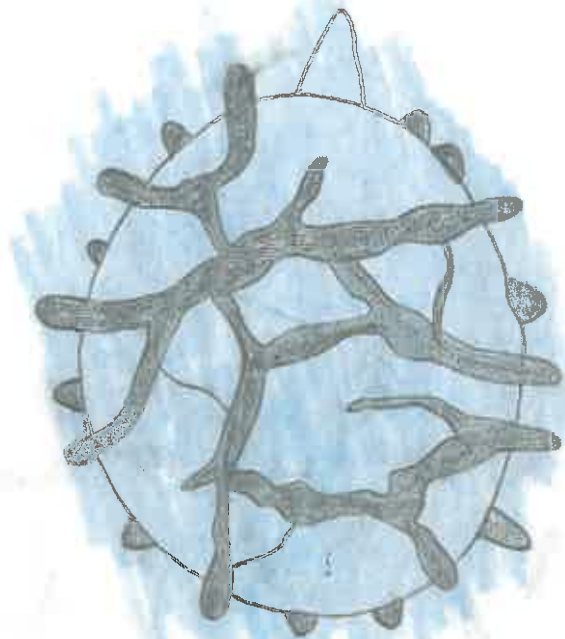
pull together



PL - x 1000



Ch - x 1000



429

Spore - x 8000

Kelly-1304

LACTARIUS VIETUS

Magnetawan, Ontario, Abram Flexner's place, August 17, 1921 (det. as

L. vietus by C. H. Kauffman).

Spores and other characters as in Bas-620, except that the pleurocystidia are a bit longer: 64-105 x 5-8 μ ; cheilocystidia 34-50 x 4-5 μ .

I accept Kauffman's identification on the assumption that he based it on the typical character and behavior of the latex.

Sm-1584

vietus
LACTARIUS ~~PARVUS~~ ~~Peck~~

Huron Mts., Mich., NJS and AHS, August 28, 1968.

Notes by Smith

Pileus 2-3 cm, convex then depressed, lead-gray, glabrous, viscid, azonate. Latex acrid, white, unchanging, staining gills gray.

Lamellae decurrent, close, pallid yellow.

Stipe paler than cap, viscid, glabrous.

Notes by Hesler

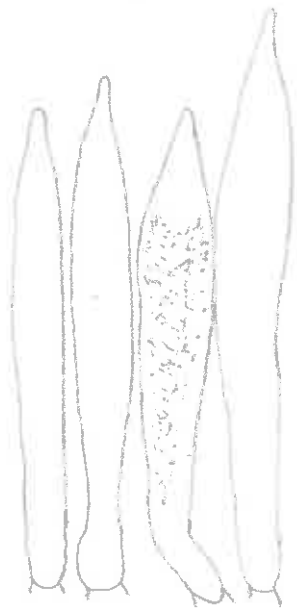
Spores 7-9 x 6-7.5(8) μ , ellipsoid, warts 0.2-0.5 μ high, bands forming a more or less partial reticulum or none. Basidia 36-42 x 8-10 μ , 4-spored. Pleurocystidia 60-77 x 7-10 μ , fusoid, subclavate-acuminate; cheilocystidia 28-47 x 5-7 μ , more or less similar. Gill trama undulating-subparallel. Pileus trama vesiculose. Pileus cuticle an ixotrichodermium; hypodermium brown. Stipe cuticle an ixocutis; rosettes present.

Close to vietus, in which the latex becomes gray; varius in which the stipe cuticle is dry!

In this collection the pileus is larger than described by Peck.

Lactarius ^{victus} ~~parvus~~ Pr.

N.J. Sm - 1584



Sp. $\times 1000$



Ch. $\times 1000$

Sm-1679

retus
~~LACTARIUS PARVUS~~

Marquette Co., Michigan, August 29, 1968.

Same characters as Sm-1584.

N. J. Sm-1783

retus
LACTARIUS ~~PARVUS~~

Huron Mts., Michigan, August 29, 1968

Notes by N. J. Smith

Pileus 1-4 cm, viscid, lead-brown, edge pallid. Context taste slowly bitter and acrid. Latex white, staining gills olivaceous gray or dingy brown. Lamellae decurrent, whitish, narrow, close. Stipe slimy, pallid with a tinge of lead-brown.

Spores pale pinkish buff.

Notes by Hesler

Spores 6.5-9 x 5.5-7 μ , warts 0.2-0.4 μ , bands branches forming a partial to nearly complete reticulum. Basidia 36-40 x 7-8 μ , 4-spored. Pleurocystidia 48-78 x 6-9 μ , ven tricoe to clavate-acuminate; cheilocystidia 30-50 x 5-7 μ more or less similar. Gill trama sub-parallel. Pileus cuticle more or less an isotrichoderm or ixo-lattice; hypoderm brown. Stipe cuticle a very thin ixocutis; rosettes present.

N-71-2351

LACTARIUS VIETUS (Fr.) Fr.

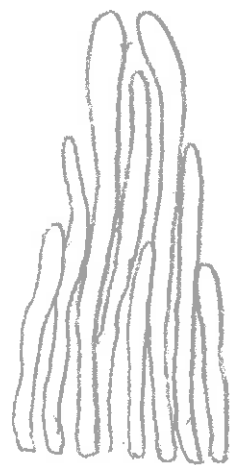
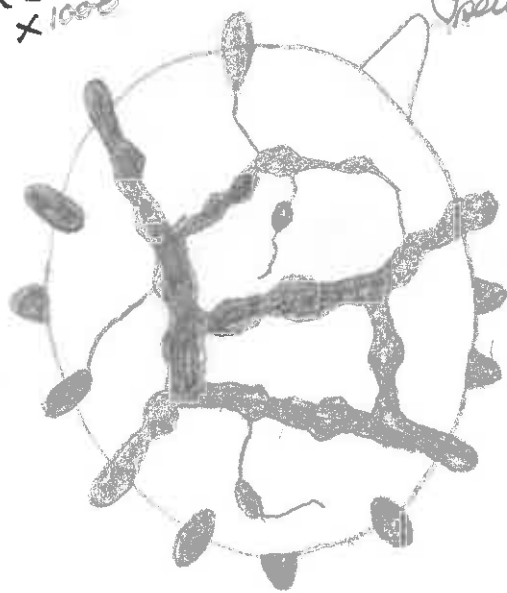
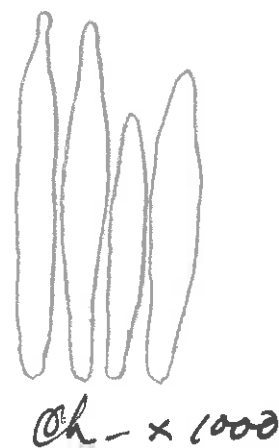
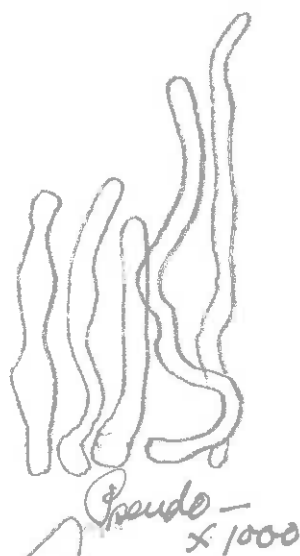
Fungi Exsicc. Suecici, Lundell-Nannfeldt.-2351, in
Sphagnum bog with Vaccinium, Rubus, Agrostis,
Femsjö Parish, Sept 8, 1948.

(5.5)

Spores 7.5-9.5 x 6-8 μ , ellipsoid, warts 0.5-0.7 μ
high, with ^{broad}~~wavy~~ bands and fine lines forming a ^{partial} reticulum.
Basidia 40-50 x 8-10 μ , 4-spored. Pleurocystidia 52-73 x
5-6 μ , awl-shaped to slender-ventricose, granular, apices
tapering, at times subcapitate; with a refractive content,
pseudocystidia [32-60 x] 3-6 μ , filamentous, often crooked,
clearing derived from lactifers which are numerous in
the ^gelatinous cuticle, the pileus trama and gill trama.
Cheilocystidia 35-48 x 5-7 μ , ventricose, granular. Gill
trama ^{of subparallel}~~vesiculose (cells and hyphae)~~. Pileus trama
vesiculose. Cuticle of pileus a zone, 50-75 μ thick,
of gelatinous hyphae. Cuticle of stipe of repent hyphae,
with scattered, pyramidal tufts of filamentous caulocystidia,
30-64 x 3-5 μ . Clamp connections none.

Lactarius vietus (Fr.) Fr.

Sundell-Kamufeldt-2351, Fungi Suecici, in Sphagnum
bog among Vaccinium, Rubus, & Agrostis, Sept 8 - '48,
Femsjö Parish.



W-K - 2948

retus
LACTARIUS ~~ALASKENSIS~~ sp. nov.

Gregarious in leaf-mold, in woods (birch, alder, willow),

Thunderbird Falls, Alaska, Wells-Kempton, July 19, 1964. #2

Notes by Wells-Kempton

Pileus 1.5-3.5 cm broad, expanding plano-convex, with a minute, acute papilla, becoming depressed, usually becoming minutely cuspidate, grayish brown, sometimes paler (nearly lilac-tawny) with age or drying, azonate, glabrous, dry. Context pallid, or tinged pileus color under cuticle, unchanging, thin; odor and taste not distinctive. Latex whey-like, unchanging, scanty, acrid.

Lamellae short-decurrent, pallid flesh color, medium narrow, close, fragile, rather frequently forked near the stipe, edges entire and concolorous.

Stipe 2.5-5.5 cm long, 5-8 mm broad (apex), pallid whitish, usually tinted pileus-color, dry, base white-mycelioid.

Macrochemical (all parts): Amm., negative; KOH, negative; FeSO₄, negative; Phenol, slightly vinaceous.

Notes by Hesler

Spores 5.5-7(7.5) x 5-6 μ , ellipsoid, some subglobose, warts 0.2-0.3 μ high, bands forming a partial or no reticulum. Pleurocystidia 52-80 x 5-9 μ , slender ventricose-acuminate; pseudocystidia filamentous, on sides and edges; cheilocystidia 24-42 x 3-6 μ , subventricose-acuminate. Gill trama of undulating subparallel. Pileus trama vesiculose. Pileus cuticle of colorless, interwoven, the terminal elements as scattered pileocystidia (cylindric, clavate). Stipe cuticle

Q W-K - 2948

L. ^{*vietus*}~~alaskensis~~ - page 2

of repent, dry hyphae, with scattered caulocystidia (similar to pileocystidia); rosettes present. Clamp connections none.

Factarini alaskensis sp. nov.
victus

N-K 2948



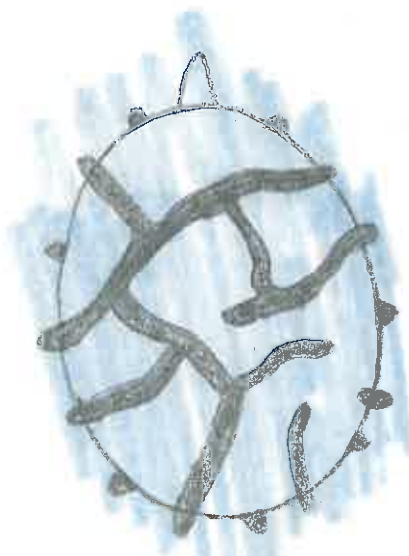
Pl $\times 1000$



Ch $\times 1000$



Pseudo $\times 1000$



1334

Spore $\times 8000$

Bigelow - 4552

vitellus
LACTARIUS ~~TENUIS~~ sp. nov.

(see CARD: 4453)

Gregarious, on needles under conifers, near Guerette, Maine, August 30,

1953. (Big-4453 is L. tenuis sp. nov.)

Notes by Hesler

Macro appearance similar to Big.-4453.

Spores 7-9 x 6-7 u, warts 0.3-0.6 μ . Pleurocystidia 52-73 x 7-9(10) μ ; pseudocystidia filamentous; cheilocystidia 32-50(62) x 5-7(12) μ . Pileus cuticle an ixocutis (interwoven): Stipe cuticle a very thin ixocutis; rosettes none.

This has larger pleurocystidia and cheilocystidia than in 4453; otherwise they agree.

Bigelow - 4577

votus
LACTARIUS ~~TENUIS~~ sp. nov.

(see CARD: 4453)

Near New Sweden, Maine, August 31, 1956 (same as 4453) ~~I. tenuis sp. nov.~~

Spores 6-8.5 x 5.5-7.5 μ . Otherwise as 4453.

Bigelow - 4672

retus
LACTARIUS ~~TENUIS~~ sp. nov.

Scattered on mossy log in mixed woods, near Guerette, Maine, September 2,
1956 (see card 4453)

This is the same as 4453.

Sm-4758

LACTARIUS VIETUS

Gregarious on moss at edge of swamp, Sand Point, Lake Timagami, Ontario,
September 10, 1936.

Notes by Smith

Pileus 4-7 cm broad, plane or slightly depressed, a few with an
obscure papillate umbo, grayish-purple umber, ("benzo brown" to "light
cinnamon drab" to "drab"), appearing vinaceous pruinose when dry; surface
[moist or dry, not viscid when wet or only very slightly so,] ^{see below!} azonate,
margin striatulate in age, color pale, context white, thickish, fragile,
slowly acrid. Latex white, slowly acrid, unchanging, staining the gills
pallid grayish brown.

Lamellae close to crowded, subdecurrent, narrow, tapering to each
end, cream color, staining grayish brown, many forked near the stipe.

Stipe 5-7 cm long, 10-12 mm thick, concolorous with pileus or paler
and more conescent, whitish in some, ^{dry,} solid, equal, some narrowed below.

Spores 7-9 x 6-7.5 μ , broadly ellipsoid, strongly amyloid, reticulum
heavy and more or less same diameter as the warts which are obscured by it;
basidia four-spored; pleurocystidia 50-65 x 9-12 μ , fusoid-pointed, content
oily to granular, hyaline in KOH; pileus trama a hyaline interwoven layer
of nongelatinous to subgelatinous hyphae.

Notes by Hesler

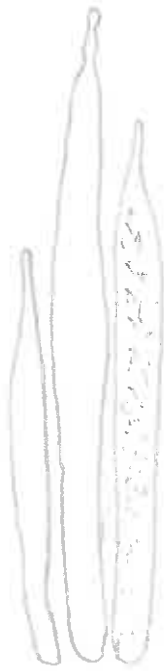
and branches

Spores 7-9(9.5) x (5.5)6-7.5 μ , warts 0.3-0.6 μ high, bands forming a
complete or at times partial reticulum. Basidia 40-44 x 7-9 μ , 4-spored.
Pleurocystidia 53-86 x 5-⁸ μ , slender fusoid, granular-spangled; cheilocystidia
38-52 x 4-6 μ , similar. Gill trama subparallel. Pileus trama vesiculose.
Pileus cuticle ^{an ixocutis.} ~~of repent hyphae, the surface ones are~~ subgelatinous.
Stipe of repent, dry hyphae; rosettes present. Clamp connections none.

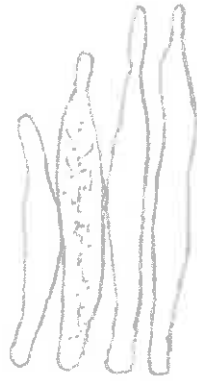
over

In macro appearance this resembles
Bas-620 (Netherlands).

Lactarius retus
Sm-4758



Pl- x 1000



Ch- x 1000

Bigelow - 4759

vetus
LACTARIUS ~~TENUIS~~ sp. nov.

PHOTO

On mossy log, near Guerette, Maine, September 4, 1956

(not found)

Same as 4453.



Sm 4759 Lactarius ^{victus} ~~tenius~~ sp. nov.

vietus

Bigelow - 4770 LACTARIUS ~~SUBPALLENS~~ sp. nov.

Under conifers, near Guerette, Maine, September 4, 1956

Notes by Bigelow

Pileus 2-6 cm broad, convex to plane, slightly depressed, "vinaceous buff" to pale drab, viscid, azonate, glabrous, even. Context rather thin; acrid. Latex white, unchanging, staining gills brownish, taste acrid.

Lamellae short-decurrent, close, narrow, pale cream, staining brownish.

Stipe 3-4 cm long, 6-10 mm thick, white, glabrous, viscid, solid, equal.

Spores white.

Notes by Hesler

Spores white in deposit, 6-8 x 5.5-7 μ , globose to short-ellipsoid, warts 0.3-0.5 μ high, bands and branches forming a partial or no reticulum. Basidia 42-50 x 7-8 μ , 4-spored. Pleurocystidia 50-76 x 6-10 μ , subfusoid, apices tapering (acuminate); cheilocystidia 27-48 x 4-7 μ , subcylindric to subfusoid. Gill trama of subparallel to slightly interwoven hyphae. Pileus trama vesiculose. Pileus cuticle an ixocutis; hypodermium brown. Stipe cuticle an ixocutis, at times only subgelatinous; rosettes present. Clamp connections none.

Characterized by its vinaceous buff to pale drab, viscid pileus, rather thin flesh, white unchanging acrid

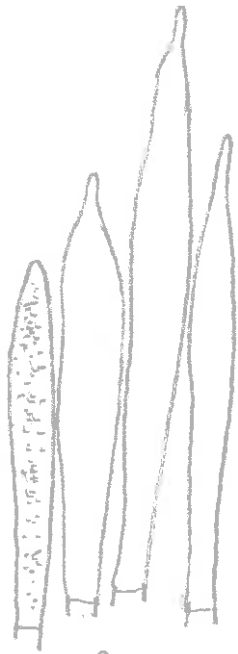
Bigelow - 4770

⁻
vetus
L. ~~subpallens~~ - page 2

latex which stains brown, white spores, and viscid stipe.

It is near L. pallens which has distinctly larger spores and larger cheilocystidia.

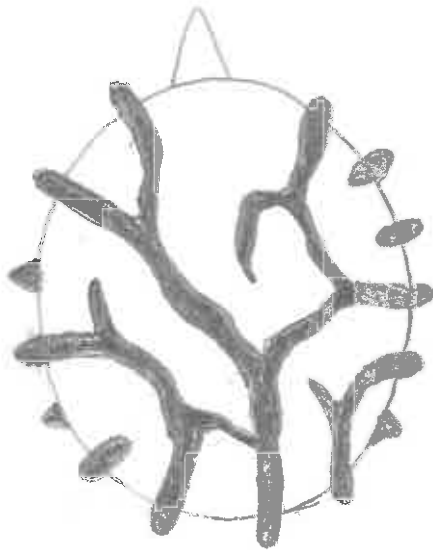
Nectarium ^{vietn} ~~subpallens~~ sp. nov.
 Bagelow - 4770



Pl. - x 1000



Ch. - x 1000



Frax. - x 8000

Bas-4802 (Netherlands) LACTARIUS VIETUS (Fr.) Fr.

In pine-birch forest, October 9, 1966, leg.-det. Bas

Notes by Bas

Pileus 9 cm broad, margin downcurved, isabella with a violaceous tinge, subviscid, azonate, fleshy. Context olive brown granular. Latex gray.

Lamellae cream, spotted brownish ochraceous by grey drops of latex.

Stipe 5 cm long, 15 mm thick, clavate bulb 2.5 mm, dingy ochraceous, context pale ochraceous.

Notes by Hesler

Spores 7-9.5 x 6-7.5(8) μ , warts 0.3-0.7(1.0) μ . Other micro characters as in Bas-620, except rosettes present in stipe of 4802.

Maas Geesteranus - 8006

LACTARIUS VIETUS

Under pines, scattered birch nearby, Netherlands, September 29, 1951

Notes by Geesteranus (transl. by Donk)

Pileus purplish-brown when moist, gray-brown with foxy or lilac hue when dry, somewhat rugulose, somewhat viscid when wet, slightly shining when dry, with or without small papillae, margin tomentose. Latex whitish becoming greyish, acrid.

Lamellae cream-flesh-colored, dirty-greyish-brown when bruised.

Stipe pale flesh-colored, white-hoary toward the base, date-brown when bruised, becoming hollow, cylindrical, wider when flattened, fluted and with depressions.

Notes by Hesler

Spores 7-9 x 6-7.5 μ , warts 0.3-0.6(1.0) μ high, bands and branches forming a partial reticulum. Other micro characters as in Bas-620, except pleurocystidia fewer and pseudocystidia more abundant.

10309

retus
LACTARIUS ~~PARVUS~~ Pl.

Ontario, det. A.H.S., September 7, 1936.

Spores 7.5-9.5 x 6-7.5 μ . Pleurocystidia 43-60 x 5-10 μ ;
cheilocystidia 33-56 x 5-6 μ . Cuticle a narrow gelatinous zone.
Agrees with Type.

2

Bigelow 11495 LACTARIUS VIETUS (?)

Penobscot Co., Maine, September 2, 1962.

Notes by Bigelow

Pileus drab, zonate, viscid. Context white, rather thin, acrid. Latex white, drying pale gray green, acrid.

Lamellae subdecurrent, ochraceous buff, distant, lamellulae numerous.

Stipe short, pale ochraceous buff, tapering downward.

Spore deposit: cream color.

Notes by Hesler

Spores 6-8 x 5.5-6.5(7) μ , ellipsoid to subglobose, warts 0.3-0.5 μ high, some isolated, with broken bands, no reticulum. Basidia 37-42 x 6-8 μ , 4-spored. Pleurocystidia 72-96 x 6-7 μ , subfusoid to subventricose, apices tapering, granular-spangled; pseudocystidia filamentous; cheilocystidia 32-44 x 3-6 μ , subfusoid, granular. Gill trama of interwoven hyphae. Pileus trama vesiculose. Pileus cuticle an ixocutis, hyphae more or less interwoven. Stipe cuticle of repent, dry hyphae, with scattered cylindric to clavate caulocystidia; rosettes present.

L. vietus is often described as azonate and with close gills. ^{Neuhoff}~~Ward~~, however, says the cap may be ^{spotted-}zonate. It might be a variety of vietus.

Factarius vietus?

Bigelow - 11495



Pl - x 1000



Ch - x 1000

11682

velut (Fr.) Fr.
LACTARIUS ~~PARVUS~~ Pk.

Ontario, det. A.H.S., September 8, 1936.

Spores 7-9 x 5.5-7.5 μ . ~~Otherwise as in type.~~

Bigelow 12445 LACTARIUS (VIETUS?) (Card 12416)

Carrol County, N.H., Aeptember 5, 1963.

Spores as in 12416. Material in young stage. Pileus cuticle less gelatinized; pleurocystidia and cheilocystidia more cylindric to only slightly ventricose of fusoid. Apparently the shape changes as the carpophores (and cystidia) mature.

vietus *ex. lato*

Bigelow - 14898

LACTARIUS ~~FIBRILLOSPES~~ sp. nov.

On debris (leaves, twigs, straw), Conway, Massachusetts,

September 23, 1966 (in Herb. Mass.)

Notes by Bigelow

Pileus "vinaceous buff" to "tulleul buff," subviscid, often with a small umbo. Latex white, staining gills distinctly brown, mild. Lamellae cartridge buff, close, decurrent, narrow. Stipe dingy, similar in tone to cap or concolor with gills.

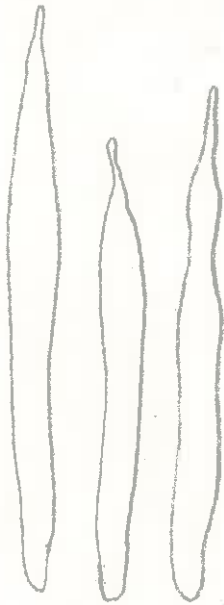
Spores pale cream.

Notes by Hesler

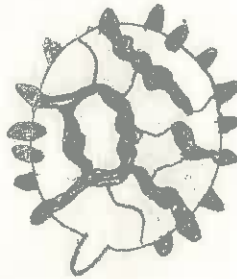
Spores 6-8 x 5.5-7 μ , bands forming a partial or sometimes complete reticulum, warts 0.2-0.5 μ high. Pleurocystidia 53-72 x 6-9(10) μ , clavate, apices acute; cheilocystidia 26-45 x 4-5 μ , subfusoid or ventricose. Pileus cuticle an interwoven ixocutis. Stipe cuticle dry, repent.

Roctarius vietus Fr.

23231 (Thiers - 4453)



Pl. - x 1000



x 3000



Ch - x 1000



Xotrichodermium - x 1000

Sm-23509

LACTARIUS VIETUS (Fr.) Fr.

Scattered on wet ground along Carp Creek, Rees' Bog,
Cheboygan County, Michigan, August 30, 1946

Notes by Smith

Pileus 3-5 cm broad, convex with an inrolled margin, expanding to plane or shallowly depressed, oldest ones broadly vase-shaped, surface glabrous, subviscid when wet but soon dry, evenly "ecru drab" with a hoary sheen, paler in age. Latex white, unchanging, but spotting the gills dingy gray, taste acrid.

Lamellae crowded, narrow, decurrent, white, spotting gray when bruised.

Stipe 6-8 cm long, 10-15 mm at apex, clavate, glabrous, dry, pallid or tinged with color of the cap, becoming hollow.

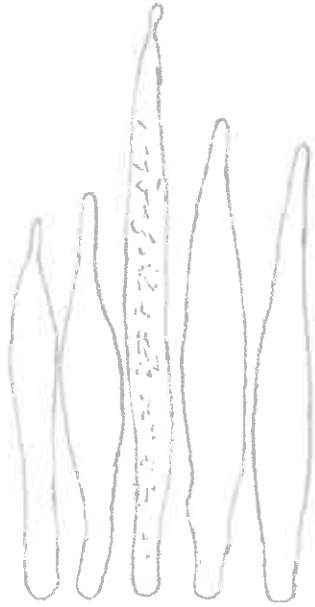
Spores white, in deposit, 7-8 x 6.5-7 μ , broadly ellipsoid, distinctly warty and with many warts connected by lines but not forming into a complete reticulum. Basidia four-spored. Cheilocystidia and pleurocystidia similar, scattered to rare, projecting slightly on sides of gills, more so on edge, fusoid or apex drawn out to a filamentous tip, hyaline, content refractive. Cuticle of pileus a thin layer of narrow subgelatinous hyaline hyphae.

Notes by Hesler

Spores 7-9(9.5-10) x 6.5-8 μ , ellipsoid, at times

subglobose, warts 0.3-0.6 μ high, bands forming a partial reticulum, rarely an almost complete reticulum. Basidia 40-45 x 6-8 μ , 4-spored. Pleurocystidia 50-78 x 5-9 μ , subfusoid, apices often long-tapering, granular-spangled; usually inconspicuous; cheilocystidia 33-68 x 7-10 μ , subfusoid, not abundant, granular-spangled. Gill trama of undulating, subparallel hyphae. Pileus trama vesiculose. Pileus cuticle a thin ixocutis; hypodermium brownish; rosettes below. Stipe cuticle repent, bearing trichodermial colorless hyphae; rosettes present. Clamp connections none.

Gastarius varius Fr. ~~var. varius~~
victus (Fr.) Fr.
Sm - 23509



Pl. x 1000



Ch. x 1000

25119

OK
LACTARIUS VIETUS Fr.

Tyrol, under Betula, Moser, September 1, 1962

Spores 7-9 x 6-7.5 μ , ellipsoid, warts 0.3-0.7(1.0) μ , with broad more or less nodulose bands and some lines forming a partial reticulum. Basidia 47-52 x 8-10 μ , 4-spored. Pleurocystidia 52-87 x 6-9 μ , ventricose-fusoid, granular-spangled; pseudocystidia filamentous, 2.5-4 μ broad, often crooked, occasionally branched; cheilocystidia 33-45 x 4-6 μ , similar to pleurocystidia. Gill trama slightly interwoven, with conspicuous lactifers. Pileus trama vesiculose. Pileus cuticle a gelatinous zone, an ixocutis. Stipe cuticle of repent, dry hyphae, with a scattered few fascicles of hyphoid, cylindric caulocystidia, 35-65 x 2.5-4 μ . Clamp connections none. Rosettes rare and inconspicuous.

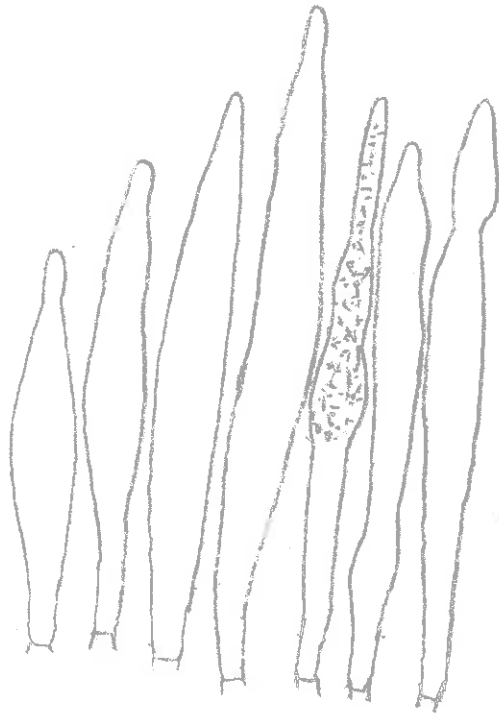
Agrees with Bas-620.

Moser, in his Key, says that the pileus is violet-grey to grey-brown, with a violet-brown center. Stipe dry. Lamellae where bruised becoming olive-grey.

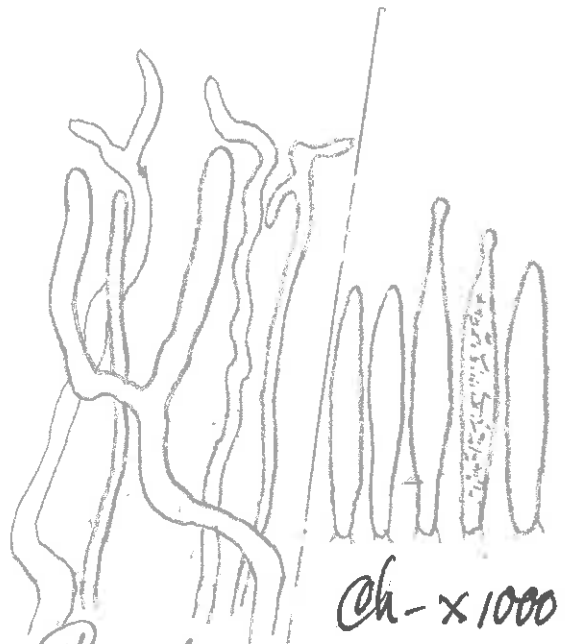
Lange says the milk becomes gray; the gills are whitish then isabella-ochry, and slowly become somewhat fuscous where bruised.

Lactarius vetchus Fr.

25119 (Moser, Austria)



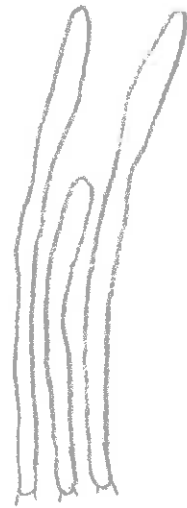
Sp. x 1000



Pseudo-x 1000

[Spores as in Bas-620]

~~23221~~ 7



Spore -
x 1000

(Term - 35312)

Bigelow-6253

LACTARIUS TRIVIALIS var. GRACILIS Pk.

vietus (Fr.) Fr.
Exclude! Lack of information
~~*hypotaenae* nom. nov.~~

Under hardwoods, near Hawley, Massachusetts, September 8, 1957

Notes by Bigelow

Pileus 1-3(4) cm broad, drab, viscid. Latex white, drying gray-green, staining the gills brownish, slowly acrid.

Lamellae pale cream, narrow, close, thin, staining brownish.

Stipe 2-3(4) cm long, 3-5(8) mm thick, at times compressed (then thicker), pale drab, solid, viscid.

Notes by Hesler

Spores 7-8.5 x 5.5-7 μ ; warts 0.3-0.4 μ high, bands forming a partial reticulum, or more rarely nearly complete, and with an occasional free-end branch. Basidia 33-38 x 7-8 μ , 4-spored.

Pleurocystidia 53-70 x 5-10 μ , subfusoid or subcylindric, granular-spangled; cheilocystidia 28-47 x 4-8 μ , similar, ^{on most the neck bulbous.} Gill trama of narrow, undulating, subparallel hyphae. Pileus trama vesiculose.

Pileus cuticle a thin ixocutis, with scattered, cylindric, or subclavate pileocystidia. Stipe cuticle a very thin ixocutis; rosettes none. Clamps ^{connection none.} none.

This agrees in micro characters with the type of L. trivialis var. gracilis. (= *L. vietus*)

Lactarius ~~trivialis~~ irretus (Fr.) Fr.
~~var. gracilis~~ *PK*.
now = *Hortoni* nom. nov.
Bigelow - 6753
(Tenn - 35312)



Pl - x 1000



Ch - x 1000

[Spores as in
Type]

TENN-35320

Bigelow - 8704

retus ss lato
LACTARIUS ~~FIBRILLOSCIPES~~ sp. nov.

35 mm PHOTO

Under hardwoods, Wildwood Cemetery, Amherst, Massachusetts, October 6, 1959.

Notes by Bigelow - TYPE

Cap "vinaceous buff" to "cinnamon drab," viscid, glabrous, azonate, at times umbonate, paler in age, margin whiter. Latex white, staining brown, mild. Odor fragrant.

Gills whitish to pale ivory, staining brown.

Stipe whitish, hoary but finely matted, fibrillose under lens.

Spores pale cream.

Notes by Hesler

Spores yellowish in deposit, $6-8 \mu \times 5.5-7 \mu$, bands forming more or less a partial to more rarely a complete reticulum, warts $0.3-0.5 \mu$ high. Basidia $38-45 \times 8-10 \mu$, 4-spored. Pleurocystidia $45-67 \times 5-8 \mu$, ventricose, or subcylindric, apices acuminate; cheilocystidia $36-50 \times 4-6 \mu$, similar. Pileus cuticle an ixocutis. Stipe cuticle dry, fibrillose, the terminal epicuticular elements more or less cylindric, as caulocystidia. Clamp connections none.

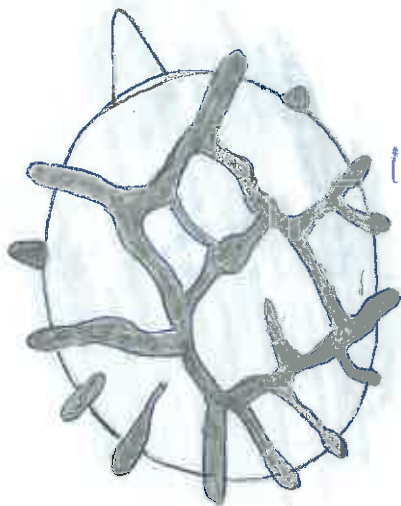
Lactorium ~~fibulosipes~~ sp. nov.
Bigelow - 8704 vietus
(= Tenn 35320)



Pl - x 1000



Ch - x 1000



1084

Spore - x
8000

(TENN-35398)

Victus s. lato

(Thiers - 6497)

LACTARIUS ~~PHILLOSPES~~ sp. nov.

DeSoto National Forest, near Hattiesburg, Mississippi, June 18, 1959

Notes by Thiers

Cap 2-3 cm, depressed, cinnamon, apiculate. Latex white, unchanging; taste mild.

Lamellae subdecurrent, pallid, staining brown when bruised, close, narrow, thin, lamellulae numerous.

Stipe 2-35 cm, 3-5 mm, concolor, compressed, hollow.

Notes by Hesler

Spores 6.5-8 x 6-7.5 μ , ellipsoid to subglobose, warts 0.3-0.7 μ high, bands forming a partial or complete reticulum. Basidia 38-45 x 8-10 μ , 4-spored. Pleurocystidia 45-60 x 4-8 μ , ventricose, apices tapering; cheilocystidia 37-46 x 4-5 μ , similar. Pileus cuticle an ixocutis. Stipe cuticle repent, with numerous fibrils, the terminal ends as hyphoid caulocystidia; rosettes present.

Agrees with Bigelow-8704, from Massachusetts, except Thiers - 6497 appears slightly brighter color.

Factarium fibulipes sp. nov.
victus
Thiers - 6497
(= Tenn 35398)



Ch - x 1000



Ch - x 1000

35725

OK
LACTARIUS VIETUS (Fr.) Fr.

Among moss, near Haga, Sweden, leg. Petersen (5015), det. Lundquist,
September 2, 1970

Notes by Petersen

Pileus margin "sorghum brown," disc "vinaceous brown." Latex white, slowly dull greenish grey, promptly acrid. Odor aromatic (of camphor).

Lamellae "pinkish buff."

Stipe apex "vinaceous buff," downward "pinkish buff."

Spore deposit pale cream.

Notes by Hesler

Spores 6.5-9 x 5.5-7 μ , broadly ellipsoid to subglobose, warts 0.2-0.5 μ , bands and branches forming a partial reticulum. Pleurocystidia 47-62 x 5-8 μ ; cheilocystidia 32-46 x 4-6 μ . Pileus cuticle an ixocutis; stipe cuticle repent, dry; rosettes present.

35728

OK
LACTARIUS VIETUS

Among moss, under pine, Nasten Forest, near Haga, Sweden, leg.

Petersen-5017, det. Lundquist (as vietus), September 2, 1970

Notes by Petersen

Pileus between "vinaceous buff" and "olive buff," center about "avellaneous." Latex acrid and bitter, off-white, changing to deep greenish gray.

Lamellae "pale ochraceous salmon."

Stipe apex "tulleul buff," middle "vinaceous buff," below "pale pinkish buff."

Spores "pale cinnamon pink."

Notes by Hesler

Spores 7-9 x 5.5-7.5 μ , warts 0.3-0.7 μ , bands and branches forming a partial reticulum. Pileus cuticle an ixocutis. Stipe cuticle repent, dry; rosettes present.

[*Tein* - 37242
Bigelow - 4453

retus
LACTARIUS ~~TENUIS~~ SP. nov.

4759-PHOTO
(not found)

Scattered to gregarious on mossy log in mixed woods, State Game Preserve,
near Guerette, Aroostock Co., Maine, August 28, 1956

Notes by Bigelow

Pileus 2-4 cm broad, plane with the disc shallowly depressed,
margin becoming elevated in age, not striate, surface glabrous, viscid
when wet, color "vinaceous buff" (~~00S 12 + 13 + 4⁰~~). Context thin, whitish
to pale vinaceous buff, staining brownish from latex when broken; no odor,
taste mild to very slightly acrid. Latex white, drying to gray-green,
staining gills brownish.

Gills adnate to short decurrent (unevenly), close, narrow (1-3 mm),
forked, ~~and~~ intervenose only when old, whitish to pale vinaceous buff,
edges even and straight.

1.5-2.5 cm ³ *whitish to pale vinaceous buff.*
Stipe ~~2 cm~~ long, ~~4-7~~ mm thick, equal, base with slight whitish
tomentum, solid, central or rarely eccentric, glabrous, ^{viscid.} ~~concolorous~~
with gills.

Spores pale cream.

pale cream in deposit,
(6)

Notes by Hesler

Spores ⁽⁶⁾ 7.5-9.5 x 6-7.5 μ , warts 0.3-0.8(1.0) μ high, bands and
free-ending branches forming a partial or no reticulum. Basidia ⁽⁹⁾ 44-52 x
7-9 μ , 4-spored. Pleurocystidia 52-66 x 4-7 μ , scattered, inconspicuous,
subfusoid to subcylindric, apices tapering slightly, granular; cheilo-
cystidia ⁽⁸⁾ 27-36 x 3-5 μ , subventricose or subfusoid, more or less similar
to pleurocystidia. Gill trama of short-celled, subparallel hyphae.

Pileus trama vesiculose. Pileus cuticle a thin (25-40 μ) ixocutis or ~~x~~

Tenn - 37242

Bigelow - 4453

viatus

L. tenuis sp. nov. - page 2

at times an ixo-lattice; hypoderm obscure. Stipe cuticle a very thin
ixocutis; rosettes none. ^{connections} Clamp none.

This has a very thin, vinaceous buff, pileus; the latex mild then slightly acrid, white and drying gray-green; gills narrow (1-3 mm) and close, whitish becoming pale vinaceous buff; solid stipe; slender and inconspicuous pleurocystidia; both the pileus and stipe with a thin (narrow) ixocutis, the latter especially thin.

It is near *L. mucidus* var. *cinereolactis* var. nov. in which the latex dries gray and stains the gills brown; and has spores 9-11.5 x 7.5-9 μ , large pleurocystidia, and relatively thick flesh.

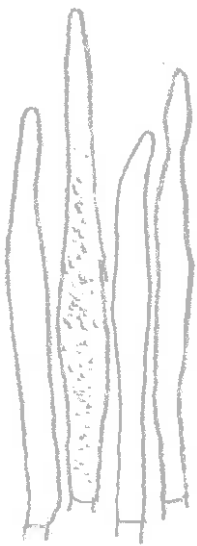
Tenn-23231
Thiers-4453

LACTARIUS VIETUS (Fr.) Fr.

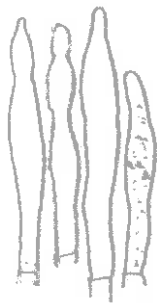
Spores 8-10 x 7-8 μ , ellipsoid to subglobose, warts 0.6-1.0 μ high, with a partial reticulum of broad bands which are more or less nodulose (catenulate warts), and some fine lines. Basidia 27-40 x 7-10 μ , 4-spored. Pleurocystidia 60-76 x 5-7 μ , slender, subfusoid, subclavate to slightly constricted-cylindrical, apices acute or appendiculate, moderately inconspicuous; cheilocystidia 28-30 x 2-3 μ , few, cylindric or subfusoid, apices tapering. Gill trama usual (cellular to slightly hyphoid). Cuticle a thin ixotrichodermium (30-45 μ thick), the hyphae more or less erect and slender (1.5-3 μ broad). Stipe cuticle of dry, repent hyphae; rosettes few. Clamp connections none.

Actinurus tenuis sp. nov. vietnam

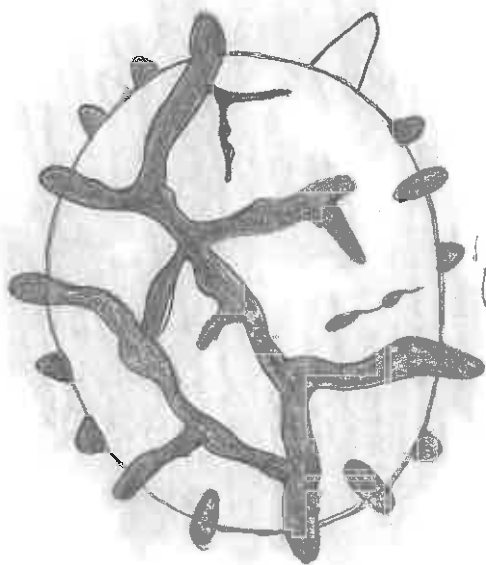
(Bigelow - 4453
(Tenn - 37242)



Sp - x 1000



ch - x 1000



'607

Spore - x 8000

Sm-41664

LACTARIUS VIETUS (Fr.) Fr.

Tahquamenon, Michigan, July 23, 1953

Notes by Smith

Pileus pale lilac-gray, viscid, soon dry. Latex staining gills gray, burning acrid. Gills close, narrow, pallid. Stipe pallid.

Spores dull white.

Notes by Hesler

Spores 7.5-9 x 6-7.5 μ , warts 0.2-0.5 μ , bands and branches forming a partial reticulum. Pleurocystidia 47-62 x 5-8 μ , ventricose-acuminate, not abundant; cheilocystidia 28-35 x 4-6 μ , similar. Pileus cuticle an ixocutis. Stipe cuticle of dry, repent hyphae.

victus (Fr.) Fr.
~~*Lactarius* *trivialis* var. *gracilis* Fr.~~

Sm-50554 LACTARIUS ~~TRIVIALIS~~ var. ~~GRACILIS~~ Fr.

On sphagnum, Michigan (place?), September 17, 1955

Notes by Smith

Pileus pallid, grayish-lilaceous, dry when faded, not zonate. Odor none; taste slowly and slightly acrid. Latex finally olive-gray, staining gills brownish, slightly acrid.

Gills staining brownish.

Stipe white, naked.

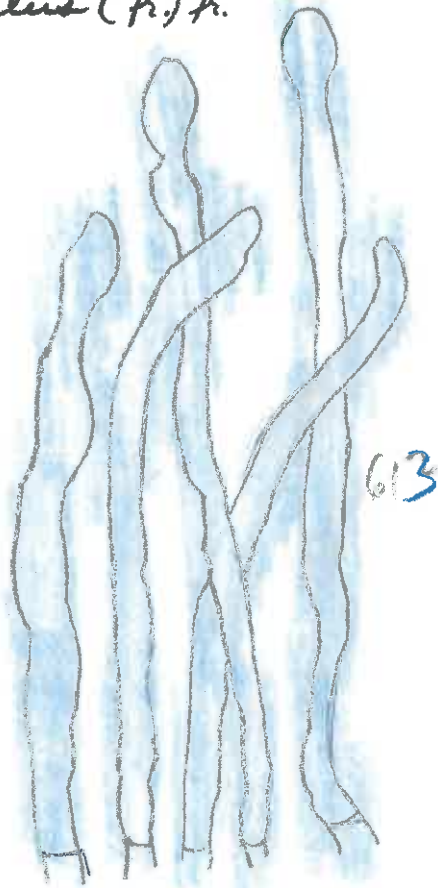
Spore white? (deposit thin).

Notes by Hesler

Spores 7-8.5 x 5.5-7 μ , ellipsoid, warts 0.4-0.6 μ high, bands forming more or less a reticulum, with some free ends. Pleurocystidia 46-62 x 4-6 μ , rare, more or less fusoid; cheilocystidia 33-45 x 5-7 μ , similar, more numerous. Pileus cuticle an ixocutis, a thin gelatinous or subgelatinous zone. Stipe cuticle an ixocutis, a very thin gelatinous zone.

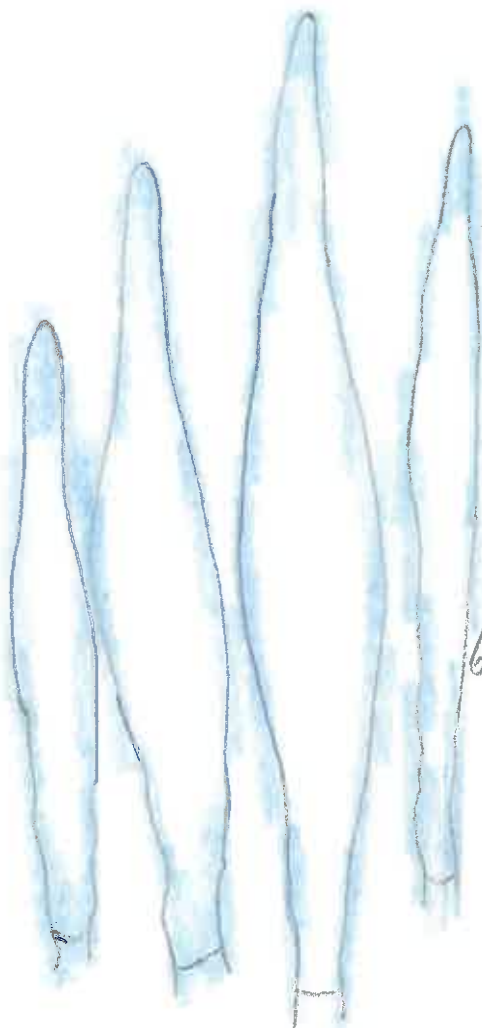
~~L. trivialis var. gracilis~~ Fr.
Lactorius vietus (Fr.) Fr.
Sm-50554

~~non - hortonii non, nov.~~



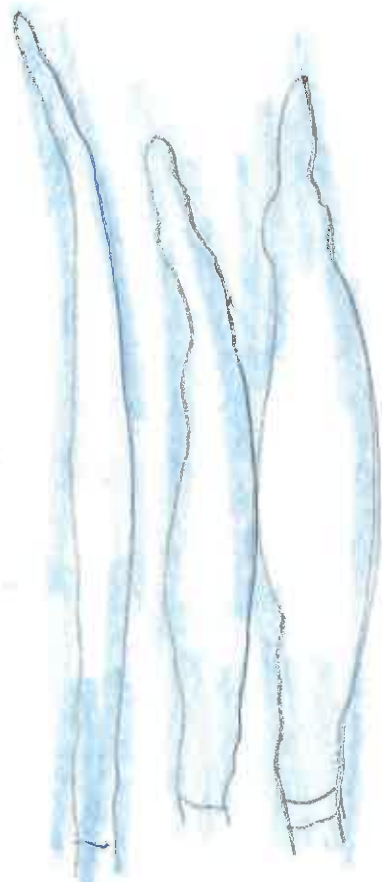
613

ch - x 2000 cnslo



611

PD - x 2000



612

ch - x 2000

Sm-53783

LACTARIUS VIETUS

On rotten conifer logs, Priest Lake, Idaho, October 1, 1956

Notes by Smith

Smith says: never viscid; spores white; see Sm-4758 which is vietus.
(?)

Notes by Hesler

General appearance and micro characters agree with Bas-620.

Sm-76134

retus (Fr.) Fr.
~~*graciliter*~~
LACTARIUS ~~AROLACTISUS~~ sp. nov.

In mixed woods, Coolin, Idaho, August 4, 1968

Notes by Smith

Pileus 2-4 cm, lilac-gray to vinaceous buff then reddish on fading, glabrous, moist, viscid, margin even. Context quickly acrid. Latex whey-like, staining gills gray then vinaceous brown, the latex-drops drying olive-brown.

Lamellae decurrent, white, in age flushed vinaceous buff, staining gray then brown where bruised, crowded, narrow.

Stipe 3-4.5 cm long, 7-10 mm thick, concolorous or paler, equal or enlarged downward, hollow, viscid.

Notes by Hesler

Spores in deposit creamy white, 6-8.5(9) x 6-7.5 μ , variable in a field, ellipsoid to subglobose, warts 0.2-0.4 μ high, bands forming a partial reticulum. Basidia 36-42 x 7-9 μ , 4-spored. Pleurocystidia 48-60 x 5-7 μ , fusoid-acuminate; cheilocystidia 30-37 x 4-5 μ , similar. Gill trama of short-celled, undulating, subparallel hyphae. Pileus trama vesiculose; rosettes in lower portion. Pileus cuticle an ixocutis; hypodermium brownish. Stipe cuticle of repent, colorless hyphae the outer of which are gelatinous--an ixocutis; rosettes numerous. Clamp connections none.

The pileus colors, the whey-like latex which dries olive-brown and stains lamellae gray are chief characters.

In general appearance, it is ~~1/2~~ suggestive of L. hibbardae, in which the pileus is dry, the spores smaller, and with different pleurocystidia and different latex.

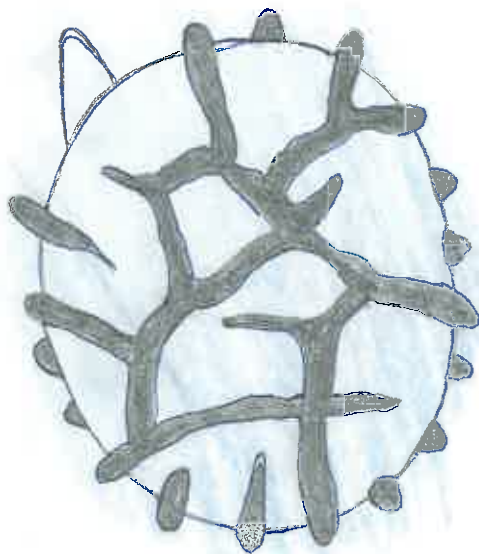
Lactorius atrolactens sp. nov.
griseoverrucosus vietn.
Sm - 76134



Sp - x 1000



Ch - x 1000



580

Spore - x 8000

Sm-77229 (W-K 2946)

LACTARIUS VIETUS

Bird Creek, on burned and decaying conifer wood, Alaska, Wells-Kempton,
August 14, 1964 (#7).

Notes by Wells-Kempton

Pileus 3-5.5 cm broad, convex, margin inrolled, then plano-depressed, occasionally acutely papillate, dull lilac-brown, drying to light-grayish-brownish (Pl. VIII B 3-5 when young and moist; Pl. XXVIII, W 4-5, tinged lilac when faded), dry (see below), moist, or sublubricous or tacky, glabrous, azonate or with 2-3 pale zones on the margin. Context pallid, tinted pileus color especially under the cuticle; odor not distinctive, taste tardily and slightly acrid. Latex white to creamy-watery-white, unchanging but staining gills grayish to brownish, tardily and slightly acrid.

Lamellae adnate then subdecurrent, pallid-flesh tinted the pileus-color, unchanging or staining brownish or grayish, medium narrow, close, brittle, tardily acrid.

Stipe 2-5 cm long, 6-10 mm thick, pallid whitish at apex, tinged the pileus-color below, hollow, base white-mycelioid.

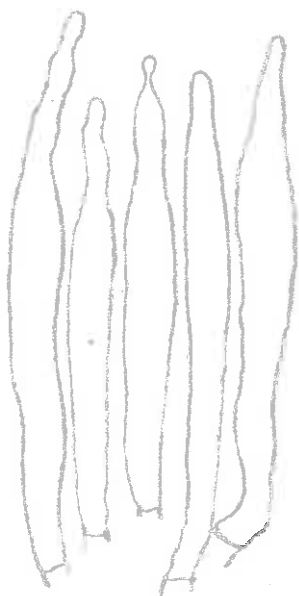
Spore deposit ivory and flesh tinted, A-B when dry.

Notes by Hesler

Spores 7-9.5 x 6-8 μ , warts 0.3-0.6 μ , bands not forming a reticulum. Basidia 46-52 x 8-10 μ , 4-spored. Pleurocystidia 60-82 x 5-8 μ , subcylindric to subclavate, more or less acuminate; cheilocystidia 30-40 x 4-7 μ , subfusoid. Pileus cuticle a thin ixocutis. Stipe cuticle a dry cutis.

Pectarius vietnamensis

Sm. 77229 (W-K 2946)



Pl. x 1000



Ch. x 1000

Sm - 80481

LACTARIUS VIETUS

Gregarious under conifers, Chapwell Forest, New Castle,
England, September 17, 1971 (near hibbardae) (Is this
vietus?)

Notes by Smith

Pileus 3-8 cm broad, plano-depressed, becoming shallowly
funnel-shaped, moist but not viscid, hoary at first,
grayish (as in hibbardae), on standing gradually dull
dark grayish-vinaceous brown (army brown to paler), often
obscurely zoned. Context pallid to white; odor somewhat
fragrant, taste soon acrid to burning acrid. Latex white,
staining the gills olive-gray dull brown.

Lamellae adnate, pale dull pinkish cinnamon, stained
(see above) by latex, crowded, narrow, edges uneven.

Stipe 2-4 cm long, about 10 mm thick, tinged with color
of the pileus, hoary, dry, nearly equal, basal mycelium
white.

Spore deposit: near pale pinkish buff.

Notes by Hesler

Spores 7.5-9 x 6.5-7.5 μ , warts 0.2-0.5 μ , bands and
branches forming a partial reticulum. Pleurocystidia 52-77
x 9-11 μ , ventricose; cheilocystidia 38-46 x 6-7 μ ,
similar. Pileus cuticle an ixocutis, or hyphae interwoven.
Stipe cuticle of repent, dry hyphae, some hyphal branches
more or less erect; rosettes present.

LACTARIUS VILLOSUS Clements

On sandy ground Hazel Creek Canyons, Brown County, River,
September 4, 1895. leg.-det. Clements, No. 5009

Type

(Deposited in Herb. Univ. Nebr., Dept. Botany)

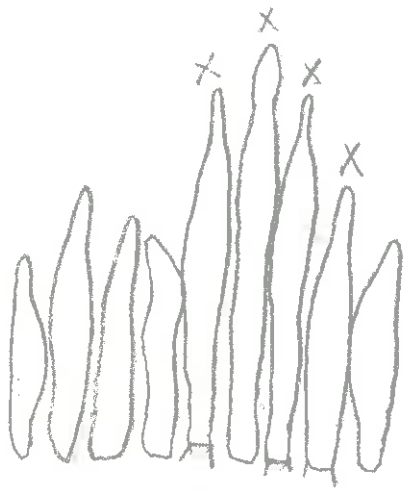
Spores 6-8 x (4)5-6 μ , ellipsoid, warts 0.3-0.6 μ high, often not numerous, reticulum more or less complete, with occasional fine lines, more rarely warts isolated. Basidia 22-27 x 5-6 μ , 4-spored (shrunken with age; they may be larger in fresh material). Pleurocystidia 26-55 x 5-6 μ , \pm fusoid to ventricose, cylindric or obclavate, apices \pm tapering to appendiculate; cheilocystidia 25-36 x 5-7 μ , clavate, subfusoid, \pm appendiculate. Gill trama of small cells; subhymenium not distinctive (although difficult to interpret). Pileus trama vesiculose with hyphae. Cuticle of repent hyphae; on the margin the cuticle bears numerous bundles of long hair-like hyphae, each hypha 2-4 μ broad, dingy brownish in 2% KOH, yellowish in Melzer's. Pileocystidia and caulocystidia none. No clamp connections.

In KOH: the cuticle, pileus trama, and gill trama soon becoming dingy then blackish; in Melzer's reagent: the cuticle, pileus trama, and gill trama become red to brownish red. The lactifers are brownish in KOH, yellowish in Melzer's reagent. The pleurocystidia and cheilocystidia are unchanged in either of these reagents. The "hairs" on the cap-margin are yellowish in Melzer's, dingy brownish in KOH.

Factarius villosus Clements

Type

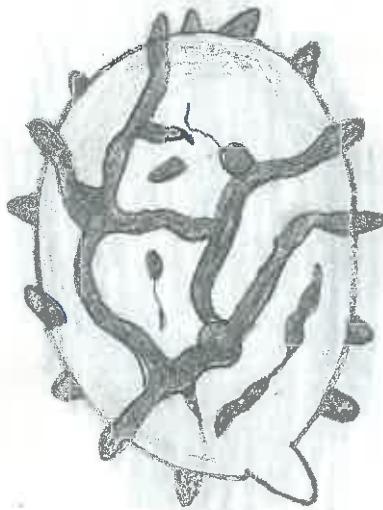
Formosa



Pl - x 1000



Ch - x 1000



975

Spore - x 8000

^{US}
LACTARIUS VELLOZOMATA^X Atk.

On soil, Smithton, Long Island, N. Y., leg. Peck &
Atkinson, Atkinson-2-215, 1904.

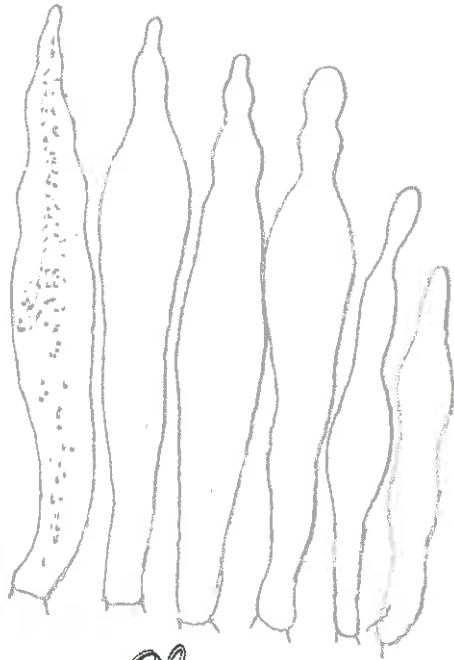
TYPE

Spores white in deposit, 6-8.5 x 5.5-7 μ , ellipsoid,
warts 0.2-0.5 μ high, bands and fine lines forming more
or less of a reticulum, fine lines at times with free ends.
Basidia 38-42 x 7-8 μ , 4-spored. Pleurocystidia 50-80 x
7-12 μ , ventricose, above and sometimes below more or less
constricted, apices sub-moniliform, scattered, granular;
cheilocystidia 26-32 x 4-6 μ , flask-shaped, subclavate,
granular, not abundant. Gill trama of undulating, subparallel
hyphae. Pileus Trama vesiculose. ^{Pileus: an ixocanth,} Cuticle a distinct zone
(80-100 μ thick) of parallel, repent, colorless, ^{hyphae.} ~~hyphae,~~
~~which appear~~ slightly gelatinized. Caulocystidia 45-78
x 4-6 μ , filamentous to subventricose, granular, scattered.
Clamp connections none.

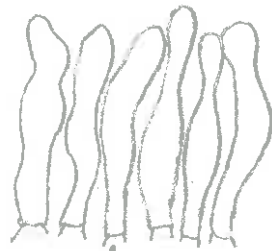
Factarium villozonatus ATK.

Type

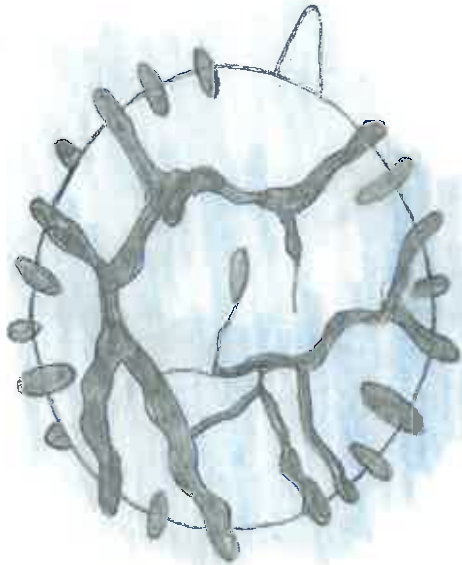
Factarium



Pl - x 1000

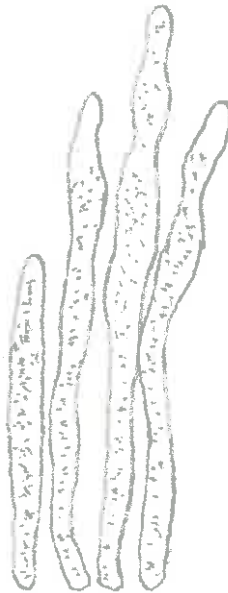


ch - x 1000



Spore - x 8000

979



Caulo -
x 1000